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PC Card Interface
for E6000 and E8000 Emulators

User's Manual

ADE-702-324

Rev. 1.0
07/08/02
Hitachi, Ltd.

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READ FIRST

• READ this user's manual before using this emulator product.

• KEEP the user's manual handy for future reference.

Do not attempt to use the emulator product until you fully understand its mechanism.

Emulator Product:

Throughout this document, the term "emulator product" shall be defined as the following products produced only by Hitachi, Ltd. excluding all subsidiary products.

- Emulator (including the evaluation chip set)
- PC card interface
- User system interface cable
- Optional board (including the memory board)

The user system or a host computer is not included in this definition.

Purpose of the Emulator Product:

This emulator product is a software and hardware development tool for systems employing the Hitachi microcomputers. This emulator product must only be used for the above purpose.

Limited Applications:

This emulator product is not authorized for use in MEDICAL, atomic energy, aeronautical or space technology applications without consent of the appropriate officer of a Hitachi sales company. Such use includes, but is not limited to, use in life support systems. Buyers of this emulator product must notify the relevant Hitachi sales offices before planning to use the product in such applications.

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This emulator product should only be used by those who have carefully read and thoroughly understood the information and restrictions contained in the user's manual. Do not attempt to use the emulator product until you fully understand its mechanism.

It is highly recommended that first-time users be instructed by users that are well versed in the operation of the emulator product.

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SAFETY PAGE

READ FIRST

• READ this user's manual before using this emulator product.

• KEEP the user's manual handy for future reference.

Do not attempt to use the emulator product until you fully understand its mechanism.

DEFINITION OF SIGNAL WORDS

DANGER indicates an **imminently** hazardous situation which, **if not avoided,** will result in **DEATH** or **SERIOUS INJURY** to you or other people.

WARNING indicates a **potentially** hazardous situation which, **if not avoided,** could result in **DEATH** or **SERIOUS INJURY** to you or other people.

CAUTION indicates a hazardous situation which, **if not avoided**, may result in **minor or moderate injury** to you or other people, or may result in **damage to the machine** or **loss of the user program**. It may also be used to alert against unsafe usage.

NOTE emphasizes essential information.

⚠ WARNING

Observe the precautions listed below. Failure to do so will result in a FIRE HAZARD and will damage the PC card interface, the host computer, and the emulator product or will result in PERSONAL INJURY. The USER PROGRAM will be LOST.

1. **Always switch OFF the emulator and host computer before connecting or disconnecting any CABLES, CARDS, or PARTS.**
2. **Always before inserting the PC card interface into the host computer, make sure that the PC card interface is correctly oriented in the direction of ◀Insert.**

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Preface

Thank you for purchasing the PC card interface (HS6000EIP01H) for the E6000 and E8000 emulators.

The PC card interface for the E6000 and E8000 emulators (hereafter called the PC card interface) connects the E6000 or E8000 emulator (hereafter called the emulator) to the host computer that has an interface conforming to the PC card specification TYPE II.

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Section 1 Specifications

Table 1 lists the PC card interface specifications.

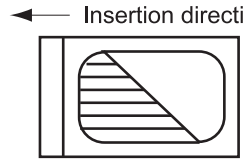
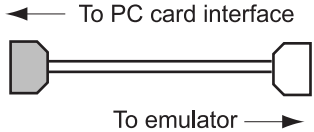
Table 1 PC Card Interface Specifications

Item	Specifications
Host computer	Personal computer conforming to the PCMCIA card specification TYPE II
Operating system for host computer	Microsoft® Windows®95 operating system (the PC card interface does not operate on Microsoft® Windows® operating system version 3.1)
Emulator	Hitachi E6000 emulator or E8000 emulator series
External dimensions	PC card: 54 mm x 85.5 mm x 4.6 mm
Weight	PC card: 29 g
Temperature	Operating: 10°C to 35°C Storage: –10°C to 50°C
Humidity	Operating: 35%RH to 80%RH (no condensation) Storage: 35%RH to 80%RH (no condensation)
Vibration	Operating: 2.45 m/s^2 max. Storage: 4.9 m/s^2 max. Transportation: 14.7 m/s^2 max.
Ambient gases	No corrosive gases
Power-supply voltage	5.0 V ± 0.25 V
Current consumption	100 mA (max.)

Section 2 Components

Table 2 lists the PC card interface components.

Table 2 Components

Item	Product Name	Configuration	Quantity	Remarks
Hardware	PC card interface		1	—
	Interface cable		1	Cable length: 1.5 m
Manual	User's manual (this manual)		1	HS6000EIP01HE

3.1 Connecting to Host Computer

WARNING

Always switch OFF the emulator and host computer, and make sure that the PC card interface is correctly oriented in the direction of ◀Insert before connecting or disconnecting the PC CARD INTERFACE. Failure to do so will result in a FIRE HAZARD and will damage the PC card interface, the host computer, and the emulator product or will result in PERSONAL INJURY. The USER PROGRAM will be LOST.

1. Check that the emulator and the host computer are turned off.

CAUTION

When connecting or removing the PC card interface, apply force only in the direction suitable for connection or removal, while making sure not to bend or twist the PC card interface; otherwise the PC card interface will be damaged.

2. Align the PC card interface to the guide in the PC card slot of the host computer, and insert the PC card interface in the direction indicated as ◀Insert on the PC card interface until it locks.

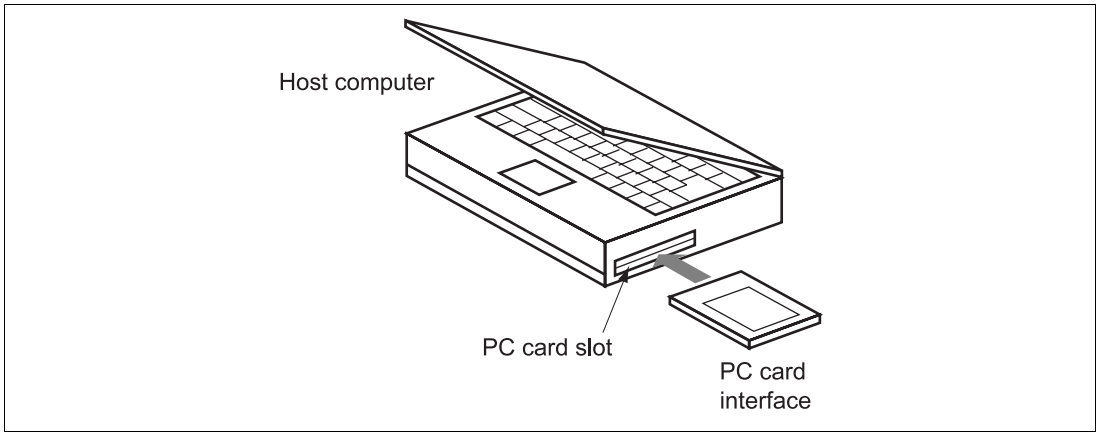


Figure 1 Connecting to Host Computer

3.2 Connecting to the Emulator

WARNING

Observe the precautions listed below. Failure to do so will result in a FIRE HAZARD and will damage the PC card interface, the host computer, and the emulator product or will result in PERSONAL INJURY. The USER PROGRAM will be LOST.

1. **Always switch OFF the emulator and host computer before connecting or disconnecting any CABLES, CARDS, or PARTS.**
2. **Always before connecting the interface cable to the emulator product, make sure that the connectors on both sides are correctly aligned.**

3.2.1 Connecting to the E6000 Emulator

When using the E6000 emulator, use the interface cable supplied together with the PC card interface, and connect the PC card interface to the E6000 emulator station through the interface cable as shown in figure 2.

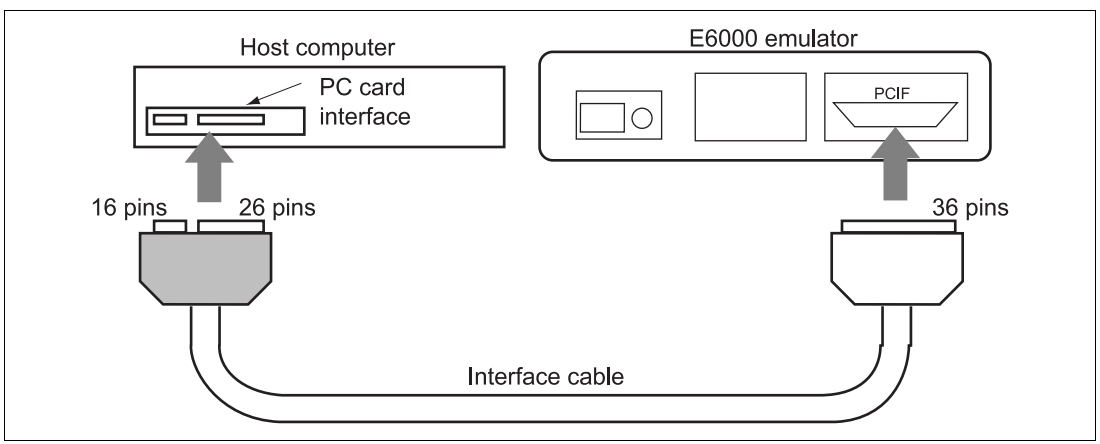


Figure 2 Connecting to E6000 Emulator

3.2.2 Connecting to the E8000 Emulator

When using the E8000 emulator, use the interface cable supplied together with the PC card interface, and connect the PC card interface to the E8000 emulator through the interface cable as shown in figure 3.

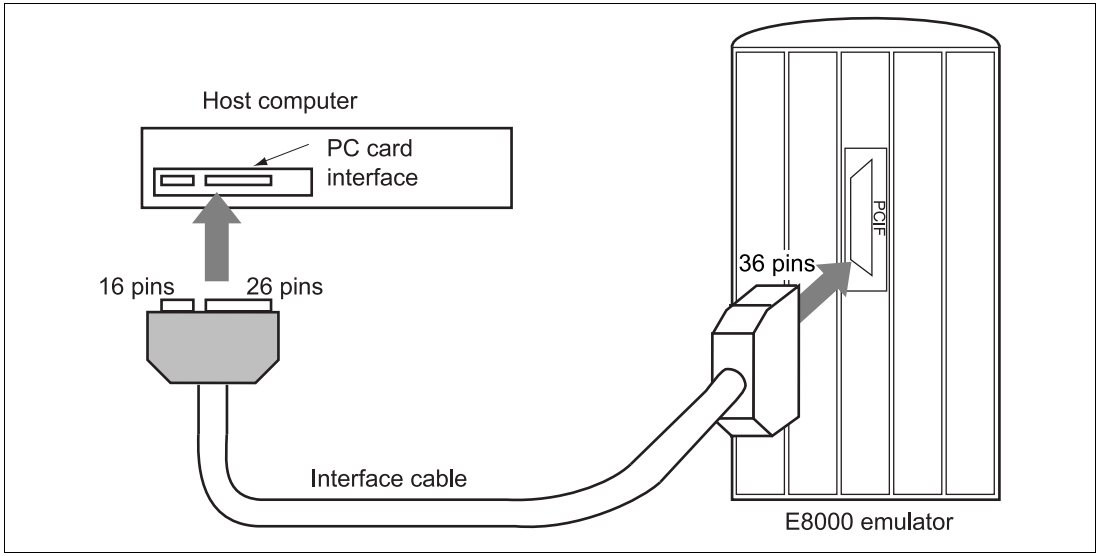


Figure 3 Connecting to E8000 Emulator

Section 4 Start Up

Start up the host computer and the emulator using the following procedure. Here, the E6000 emulator is used for an example; the E8000 emulator can also be started using the same procedure.

1. Install the Hitachi debugging interface (HDI) as the emulator control software in the host computer. Insert the HDI installation disk into the floppy disk drive of the host computer, and execute the SETUP file to install the HDI. For details, refer to the E6000 Emulator User's Manual.
2. After the HDI installation has been completed, remove the installation disk from the host computer, and turn off the host computer.
3. Check that the host computer and emulator are turned off. Insert the PC card interface into the host computer, and connect the emulator to the PC card interface through the interface cable (refer to section 3, Preparation before Use).
4. Turn on the host computer and initiate Windows®. When Windows® has been successfully initiated and the host computer has detected the PC card interface, the message box prompting the user to specify the target driver software will be displayed .

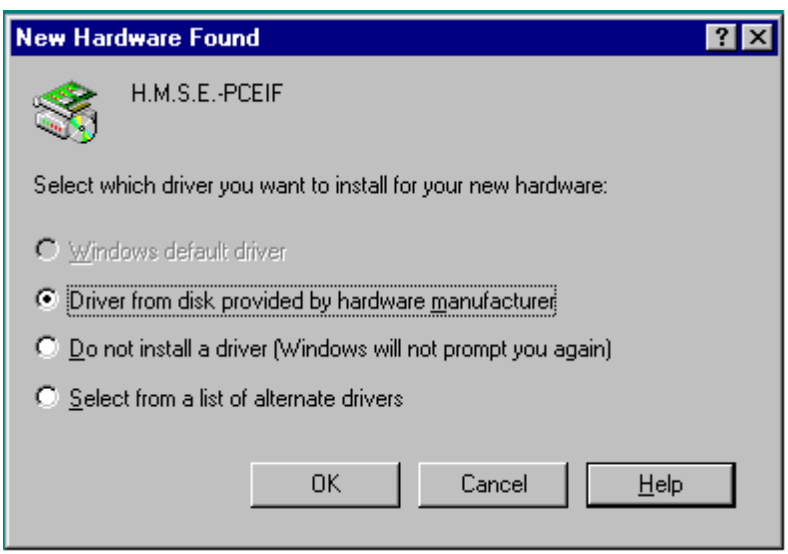

New Hardware Found
H.M.S.E.-PCEIF
Select which driver you want to install for your new hardware:
Windows default driver
Driver from disk provided by hardware manufacturer
Do not install a driver (Windows will not prompt you again)
Select from a list of alternate drivers
OK
Cancel
Help

Figure 4 Message Box at Windows® Start-up

5. According to the message on the dialog box, insert the installation disk #1 into the floppy disk drive, and click OK.

6. Turn on the emulator and double-click the HDI icon to initiate the HDI. When the HDI has been initiated successfully, the dialog box shown in figure 5 will be displayed.

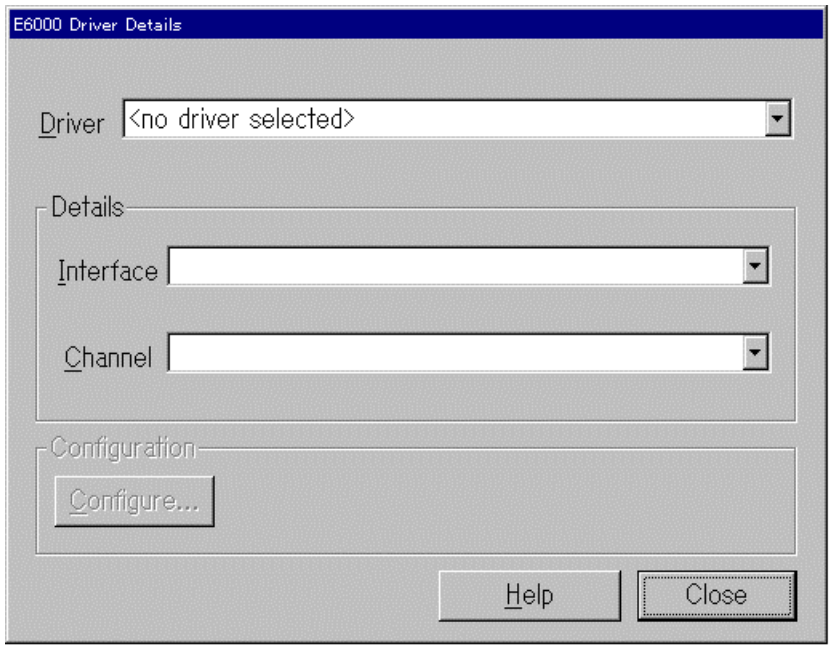


Figure 5 Dialog Box at HDI Start-up

7. Select the PCMCIA on the dialog box, and click OK. The `Link up` is displayed on the status bar, which shows that the HDI start-up procedure has been completed successfully.

Section 5 Notes on Use

1. This PC card interface is only for use with the Hitachi E6000 or E8000 emulator. Do not use with any other emulator together with the PC card interface.
2. Protect the PC card interface from excessive impacts and stresses. Keep out of direct sunlight, heat, and high humidity.
3. Do not disassemble the PC card interface or interface cable.
4. Be sure to turn off the host computer and the emulator before inserting or removing the PC card interface.